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ABSTRACT

This study was conducted to evaluate the need for and value of learning resources services for off-campus classes at Wilkes Community College (WCC). Procedures included: (1) a questionnaire to survey kinds of services offered by other North Carolina community colleges/technical institutes to their off-campus classes; (2) an examination of the course offerings at WCC to determine staff requirements, types of media needed, and potential conflicts with on-campus classes; (3) a questionnaire to determine the needs and attitudes of off-campus instructors; (4) employment of a qualified librarian to deliver the identified services and to introduce them to off-campus teachers and students; (5) a followup survey to evaluate the success of the services provided; (6) a comparative analysis of students who were exposed to the services and students who were not exposed to them to determine the significance of the approach; and (7) an effort to determine the possible need for a special vehicle to transport the materials. Fifty-five percent of those colleges responding provide services to off-campus classes. The study concluded that the services are needed and of significant value, but that a special vehicle is unnecessary. The document includes detailed tabulations of results, the questionnaires, and a literature review. (DC)

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LEARNING RESOURCES: OFF-CAMPUS SERVICES

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by

Fay Byrd, M. A. Ed.S.

A PRACTICUM PRESENTED TO NOVA UNIVERSITY
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE
DEGREE OF DOCTOR OF EDUCATION

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INTRODUCTION

The students who take courses offered by Wilkes Community College in locations away from the campus have had their textbooks and excellent instructors. It is felt by this researcher that those students missed the reinforcement of the subject matter. That reinforcement could be provided by the additional services of the Division of Learning Resources.

During an administrative staff meeting in the summer of 1973, a need for these support services was indicated. That need has been reinforced. A proposal was made in 1973 to employ an additional member of the Learning Resources Division to provide these services. Funds were not available. Neither was there any data to indicate the need for a person to provide these services. No data had been collected at Wilkes Community College to determine if students really had higher grades or learned better if media were utilized to reinforce a subject.

The need already existed to offer some type of proof that the college should provide the additional personnel and be responsible for the delivery of the media. It became the responsibility of the Director of Learning Resources to determine if the services were needed, if the services would be utilized, and if the services justified the cost.

The purposes of the practicum had to prove whether the services were administratively feasible. Those purposes were: (1) to determine the types of services provided by other North Carolina community colleges/ technical institutes to their off-campus classes; (2) to determine from

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the off-campus instructors if there was really a need and, if so, the types of essential library services; (3) to determine the locations and types of classes that needed the services; (4) to determine staff to take the predetermined services to the classes; (5) to determine if the instructors and students felt their learning climate was enhanced by the services provided by the Division of Learning Resources; (6) to determine if the need for transportation of the media and equipment justified the consideration for a special vehicle to transport the media.

BACKGROUND AND SIGNIFICANCE

Edmund Gleazer, Jr. asks, "Given what we've got to work with, what are the program possibilities OUTSIDE the confines of traditional academic practice; what are the operational implications of these?... What resources and vehicles are available to provide technical assistance in advancing both the concept and effective practice of post-secondary education which is truly community-based and performance-oriented?"[1]

Authorities in the field are recognizing that the goal for providing access to comprehensive postsecondary education by means of community colleges really is within reach. The goal is made possible by providing off-campus facilities and new instructional technologies. Those off-campus classes are provided on a base other than the college campus; they are within the commuting distance of the people.[2]

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[1]Edmund J. Gleazer, Jr., "Beyond the Open Door, The Open College," Community and Junior College Journal, August - September, 1974, p. 6.

[2]Dorothy Knoell, Planning Colleges for the Community (San Francisco: Jossey-Bass, Inc., 1973), pp. 90-93.

Some colleges are providing centers for tutoring and counseling services, adult education courses, community services for clusters of residents who have specific needs. This mini-campus center may have a full-time director and support staff to help with registration, counseling, educational and career advisement. Within it will be a small reference library for its predominantly adult, part-time, evening enrollment. These centers will more likely enroll students of all ages with more diversified needs in terms of programs and also in terms of remediation or refresher work in reading, writing, mathematics, and study skills.[3]

Prominent philosophical principles have been passed on to us. "What a student learns is significantly more important than where or how or when. Optimal learning occurs when educational opportunities are varied and convenient to the learner. The ultimate goal of educational programs should be to create self-motivated, independent learners, who will be able to use creatively and proficiently the universe of resources potentially at their disposal. Life experiences and accomplishments having specific relevance to a planned educational program are valid, frequently essential components of curricula."[4]

Wilkes Community College has been committed to carrying out the principles of taking its offerings to the people. For the fiscal year 1973-74, forty percent of the credit FTE was generated away from the campus of Wilkes Community College. Funding of the college is based on

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[3] Ibid., pp. 94.

[4] Lee J. Betts, "The evolution of Open Education," Community and Junior College Journal, March 1973, p. 16.

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the total credit FTE; however, some of the principles for providing resources and a climate for independent learners have not been but must be realized.[5]

The future of the off-campus classes for the community colleges in North Carolina may some day be as evidenced by Broward Junior College. Perhaps modules or learning villages equipped with the necessary resources will be one method of dealing with the changing needs. With the modular concept the off-campus college areas would grow as students and money become available.[6] Another possibility for the library or learning resources center to be able to take a more active role is for its personnel to be able to supervise independent study projects, teach seminars, or give courses on research methods[7] to the growing percentage of students off-campus through the establishment of learning pavilions. The learning pavilions are designed and operated to encourage and facilitate independent adult learning. The pavilion would provide a home base for adult learners and the multi-media for an independent study program.[8]

Another possibility is that no headquarters are needed. The off-campus programs can be administered from an office on the main campus. A coordinator is responsible for making certain that the

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[5]Office of Planning and Development, Wilkes Community College, August 29, 1974.

[6]"Broward Junior College: Island Campus Grows with Modules," College and University Business, August, 1974, p. 28.

[7]The Carnegie Commission on Higher Education, Reform on Campus (New York: McGraw-Hill, June, 1972), p. 30.

[8]The Carnegie Commission on Higher Education, "Toward a Learning Society, (New York: McGraw-Hill, October, 1972), p. 97.

learners' needs are met. To meet these needs, a mobile van can take college personnel and services to these off-campus locations for instruction. The van may be used to transport library and other types of instructional media, laboratory demonstration, specialized personnel for counseling, and other college functions. The van will be cheaper than building satellites or pavilions. The van can serve a dual purpose; as it moves, it advertises the college - hence, recruitment.[9]

The Carnegie Commission believes that the library should occupy a central role in the instructional resources. Its personnel should be available for guidance to materials and be qualified as instructors to facilitate learning by providing all types of learning resources and the techniques for utilizing these resources. In other words, the Learning Resources, or library personnel, must be the catalyst of continued innovation.[10]

The library, or learning resources, is the core of the instructional programs. More emphasis and dependence is being placed upon non-print media, for it has been determined that a more effective means for reaching some students and their learning styles can be through media other than texts and lectures. Not all approaches will work equally well for all students or for all faculty. Some faculty do resent suggestions that other methods of instruction might be better and for this reason, the learning resources must provide a supportive role rather than a prescriptive one in the use of instructional media.[11]

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[9]Knoell, op. cit., p. 95.

[10]The Carnegie Commission, The Fourth Revolution (New York: McGraw-Hill, 1972), pp. 34-50.

[11]Richard Richardson and others, Governance for the Two-Year College (Englewood Cliffs: Prentice-Hall, 1972), pp. 164-165.

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The opportunity of the Learning Resources can provide varied multi-media tools for learning. They can provide a new structure for learning. To remove the threat "Will machines replace teachers?" one should refer to B. F. Skinner's reply:

> "On the contrary, they are capital equipment to be used by teachers to save time and labor. In assigning certain mechanizable functions to machines, the teacher emerges in his proper role as an indispensable human being. He may teach more students than heretofore...but he will do so in fewer hours and with fewer burdensome chores. In return for his greater productivity he can ask society to improve his economic condition."[12]

B. Lamar Johnson refers to the instructor and the personnel as a team who work together to facilitate learning. The teacher becomes the manager of learning.[13]

In conclusion, the review of the literature is somewhat limited in terms of off-campus classes. However, the literature is saturated with the needs for innovation through the multi-media support. Wilkes Community College has from the beginning provided off-campus classes. Only some of the support services have been lacking.

PROCEDURE

The following itemized procedures indicate the involvement to accomplish the six administrative purposes.

1. A questionnaire was developed and mailed to all community colleges and technical institutes in North Carolina to determine the

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[12] B. Lamar Johnson, Islands of Innovation Expanding (Beverly Hills: Glencoe Press, 1969), pp. 163-168.

[13] Ibid., p. 170.

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services of their Division of Learning Resources for their off-campus classes. This procedure was planned to help identify or strengthen the needs or types of services for off-campus classes for this researcher. The data would possibly determine how the services were financed.

2. The schedule of Wilkes Community College courses was used administratively to determine the course offerings, the instructor, and the locations of classes. This information was to provide the data to determine staff requirements, the days that staff were required, the types of media required for the subject bibliographies, and the anticipation of conflicts with the on-campus classes.

3. A questionnaire was given to each of the off-campus instructors to determine their needs and their attitudes about the proposed services. This information had to be gathered since the college campus was not readily available to part-time instructors who live a distance of thirty-five miles from the campus. The data was to be used to help establish a climate conducive to cooperation.

4. A qualified librarian with teaching experience and a background in reading was employed to deliver the identified services, to recruit and orientate off-campus instructors and students to utilize the Division of Learning Resources' services for possible lecture reinforcement.

5. At the end of the quarter a questionnaire was given to off-campus instructors and students to evaluate the quality of services provided by the Division of Learning Resources. The evaluation was to reflect the learner's attitude about the services in terms of his own learning experience. From this data, the need for the continuation of

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the off-campus services could be determined; however, it became apparent that the evaluation should be based on more than the users' attitude or feelings about the service. Therefore, a composition instructor was asked to help with a comparative analysis to determine if the student's learning climate is really enhanced if he has learning resources or audio-visual media as a reinforcement to the classroom lecture.

To determine if media made a significant difference in the mean gain scores, a pre-test was given to an entire class of eighteen students at one time. There was no discussion with the students about the experiment. After the pre-test, the instructor lectured on the subject. Then one-half of the students, every other student, was asked to go to another room. One-half of the students stayed in the classroom and immediately took a post-test, an identical test as the pre-test. That group is referred to as Group 1. The other group in a different room had their lecture reinforced by a sound/slide presentation. Then the second group, referred to as Group 2, took the same post-test. (See Appendix D).

The t-test analysis was used to determine if there was a significant difference in the mean gain scores of the two groups.

6. Circulation records were kept for the quantity of media transported to off-campus classes.

RESULTS

The results of this practicum are categorized in accordance with the six problems.

1. From a total of fifty-six questionnaires that were distributed to the community colleges and technical institutes in North

Carolina, forty-two responded. All indicated they do offer off-campus classes. Fifty-five percent of those responding stated and indicated the services they provide. (See Table 1).

2-3. A total of forty courses were identified as being taught off-campus by Wilkes Community College by part-time instructors in Ashe and Alleghany Counties on Tuesday - Thursday nights. Twenty-two instructors were contacted the first two weeks of classes; one hundred percent of those instructors expressed a desire for some form of service from the Division of Learning Resources. (See Tables 3 and 4).

4. A librarian alternated weekly between Ashe and Alleghany Counties. She took bibliographies of media to help determine media needs. Seventy-five books were circulated. Eighty-three types of audio-visual media and seventeen exhibits were delivered. Forty-two pieces of equipment were delivered. A media production technician accompanied the librarian and taught five instructors how to use audio-visual equipment. She also produced media for five instructors. (See Table 7).

5. Nineteen instructors and one hundred and fifty-two students completed a questionnaire concerning their feelings about the services provided by the Learning Resources staff. In Allephany County, seventy percent of the ten instructors and eighty-three percent of the fifty-eight students indicated the media helped to provide a better understanding of the subject. In Ashe County, seventy-three percent of the nine instructors and eighty-three percent of ninety-four students indicated the media provided them with a better understanding of the subject. (See Tables 5 and 6).

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The t-test analysis proved there was a significant difference at the .05 level. Group 2, who had audio-visual media for reinforcement for the classroom lecture, scored significantly higher than Group 1 on the post-tests. (See Tables 8 - 11 and Appendix E).

6. Based on circulation data and vehicle maintenance the librarian indicated a vehicle is needed to transport the media. The circulation statistics do not indicate that a vehicle is necessary; however, the expected maintenance for an individual's car does necessitate another means for transporting the media. (See Table 7).

DATA RESULTING FROM THE STUDY

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Table 1

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SERVICES OF LEARNING RESOURCES PROVIDED FOR OFF-CAMPUS STUDENTS
IN OTHER NORTH CAROLINA TECHNICAL INSTITUTES AND COMMUNITY COLLEGES

		Frequency-Yes	Frequency-No	Percentage-Yes	Percentage-No
1.	Does your college provide instruction off-campus	42	0	100%	0
	Instructional areas provided off-campus?				
	1. Continuing education				
	a. ABE	37	5	88%	12%
	b. GED	28	14	67%	33%
	c. High School Diploma	27	15	64%	36%
	d. General interest courses	35	7	83%	17%
	e. Other	16	26	38%	62%
	2. College Transfer	10	32	24%	76%
	3. Vocational	23	19	55%	45%
	4. Occupational	24	18	57%	43%
2.	Which of the following means do you utilize to provide Learning Resources?				
	1. Via the instructor	34	8	81%	19%
	2. The students come to the LR	31	11	74%	26%
	3. The LR takes services to the classes	23	19	55%	45%
	Types of services				
	a. Books	19	23	45%	55%
	b. A-V Media	24	18	57%	43%
	c. Equipment	24	18	57%	43%
	d. GED Instruction	13	29	31%	69%
	e. Tutoring	6	36	14%	86%
	f. Other	1	41	2%	98%
3.	How often do you pick up and deliver media?				
	1. Not applicable	22	20	52%	48%
	2. Daily	6	36	14%	86%
	3. Weekly	2	40	5%	95%
	4. Monthly	2	40	5%	95%
	5. Quarterly	5	37	12%	88%
	6. Yearly	1	41	2%	98%
	7. On demand (as need arises)	9	33	21%	79%
4.	If you do have off-campus classes but have not been able to provide the needed learning services by taking them to the classes, would you like to have a group discussion to determine the means?			40%	19%

Table 2

TRANSPORTATION UTILIZED TO PROVIDE LEARNING RESOURCES
FOR OFF-CAMPUS STUDENTS

	Frequency-Yes	Frequency-No	Percentage-Yes	Percentage-No
TYPE OF TRANSPORTATION?				
1. LR staff's vehicle	14	28	33%	67%
2. State vehicle	6	36	14%	86%
3. College vehicle	6	36	14%	86%
4. Instructors vehicle	5	37	12%	88%
5. Traveling staff of instructors	1	41	2%	98%
6. Ext. director	1	41	2%	98%
TYPE OF VEHICLE?				
1. Car	9	33	21%	79%
2. Truck	5	37	12%	88%
3. Van	2	40	5%	95%
4. Special, such as bookmobile	4	38	2%	98%
HOW PERSON IS REIMBURSED IF VEHICLE BELONGS TO LR STAFF?				
1. Regular state travel	15	27	36%	64%
2. Local supplement	1	41	2%	98%
3. Gasoline purchased by institution	1	41	2%	98%
4. Not reimbursed	4	38	10%	90%

Table 3

INSTRUCTOR'S QUESTIONNAIRE TO DETERMINE THE NEEDED LEARNING RESOURCES SERVICES: ALLEGHANY

9 of 9 returned

	Frequency-Yes	Frequency-No	Percentage-Yes	Percentage-No
1. Bibliography of resources, books and audio-visual media?	9	0	100%	0%
2. Course objectives or topics?	7	2	78%	22%
3. A-V equipment provided by local school?	7	2	78%	22%
4. Need instruction in these types of equipment?				
1. 16mm projector	N/A	N/A	N/A	N/A
2. Tape recorder	N/A	N/A	N/A	N/A
3. Filmstrip projector	1	N/A	11%	N/A
4. Videotape recorder	N/A	N/A	N/A	N/A
5. Other	N/A	N/A	N/A	N/A
5. Wants list of magazines received by LRC?	N/A	N/A	N/A	N/A
6. Wish to help select books for LRC?	5	4	56%	44%
7. Wants a delivery system for equipment and media for instructor and students?	8	1	89%	11%
8. How often services needed?				
1. Weekly	4	N/A	44.5%	N/A
2. Twice monthly	4	N/A	44.5%	N/A
3. Once monthly	1	N/A	10%	N/A
4. As needed	N/A	N/A	N/A	N/A

*N/A No Answer

Table 4

INSTRUCTOR'S QUESTIONNAIRE TO DETERMINE THE NEEDED
LEARNING RESOURCES SERVICES: ASHE

13 of 13 returned

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	Frequency-Yes	Frequency-No	Percentage-Yes	Percentage-No
1. Bibliography of resources, books and audio-visual media?	13	0	100%	0%
2. Course objectives or topics?	10	3	77%	23%
3. A-V equipment provided by local school?	10	3	77%	23%
4. Need instruction in these types of equipment?				
1. 16mm projector	4	N/A	31%	N/A
2. Tape recorder	N/A	N/A	N/A	N/A
3. Filmstrip	1	N/A	8%	N/A
4. Videotape recorder	4	N/A	31%	N/A
5. Other	4	N/A	31%	N/A
5. Want list of magazines received for LRC?	8	5	62%	38%
6. Wish to help select books for LRC?	2	11	15%	85%
7. Wants a delivery system for equipment and media for instructor and students?	11	2	85%	15%
8. How often services needed?				
1. Weekly	2		85%	
2. Twice a month	1		92%	
3. Once a month	8		38%	
4. When needed	1		92%	

*N/A No Answer

Table 5

INSTRUCTOR/STUDENT EVALUATION OF LEARNING RESOURCES SERVICES
FOR OFF-CAMPUS CLASSES FALL QUARTER 1974
ALLEGHANY COUNTY

10 Instructors; 58 Students

	Frequency-Yes		Frequency-No		Percentage-Yes		Percentage-No	
	Inst.	Student	Inst.	Student	Inst.	Student	Inst.	Student
1. Were Learning Resources Services of Wilkes Community College made available to you?	10	53	0	5	100%	91%	0	9%
2. Did you receive lists of the media?	8	30	1	28	80%	52%	10%	48%
3. Were the lists helpful?	9	23	1	7	90%	77%	10%	23%
4. Did the lists contain sufficient media for your classes?	9	26	1	32	90%	45%	10%	55%
5. Were the services adequate?	9	26	1	32	90%	45%	10%	55%
6. Did the media help instructors provide better teaching experiences?	10	48	0	10	100%	83%	0	17%
7. Did the media help the students to gain a better understanding of the subject?	7	48	3	10	70%	83%	30%	17%
8. Did you select media for purchase?	5	36	5	22	50%	62%	50%	38%
9. Do you feel the services should be continued?	9	46	1	8	90%	80%	10%	14%
10. Were the Learning Resources staff efficient?	8	0	2	0	80%	0	20%	0
11. List improvements that can be made in the services.								

Table 6

INSTRUCTOR/STUDENT EVALUATION OF LEARNING RESOURCES SERVICES
FOR OFF-CAMPUS CLASSES FALL QUARTER 1974
ASHE COUNTY

9 Instructors; 94 Students

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		Frequency-Yes		Frequency-No		Percentage-Yes		Percentage-No	
		Inst.	Student	Inst.	Student	Inst.	Student	Inst.	Student
1.	Were Learning Resources Services of Wilkes Community College made available to you?	8	84	1	10	89%	89%	11%	11%
2.	Did you receive lists of the media?	9	50	0	44	100%	53%	0	47%
3.	Were the lists helpful?	8	49	1	45	89%	52%	11%	48%
4.	Did the lists contain sufficient media for your classes?	8	50	1	*12	89%	53%	11%	*24%
5.	Were the services adequate?	8	50	1	44	89%	53%	11%	47%
6.	Did the media help instructors provide better teaching experiences?	8	88	1	6	89%	93%	11%	7%
7.	Did the media help the students to gain a better understanding of the subject?	7	77	2	17	77%	83%	22%	17%
8.	Did you select media for purchase?	0	0	0	0	0	0	0	0
9.	Do you feel the services should be continued?	9	77	0	17	100%	83%	0	17%
10.	Were the Learning Resources staff efficient?	9	88	0	6	100%	0	94%	6%
11.	List improvements that can be made in the services.								

* 12 of 50 who received lists indicated not helpful - 24% of that no.

Table 7

CIRCULATION DATA

	Alleghany County		Ashe County		Total Circulated Media
	Instructors	Students	Instructors	Students	
1. Books	7	18	17	33	75
2. Equipment	3	0	4	35	42
3. Bibliographies	10	28	9	50	97
4. Magazine Lists	10	0	9	49	68
5. A-V Media	9	19	5	50	83
6. Exhibits	5	0	12	0	17

ITEM ANALYSIS

Table 8

Frequency Table for Group 1
No Reinforcement

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Pre-test	Post-test	Difference
15	40	25
25	50	25
30	50	20
25	60	35
35	60	25
35	60	35
40	70	30
25	70	45
40	85	45
		295

Table 9

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Frequency Table for Group 2
Reinforcement

Pre-test	Post-test	Difference
40	60	20
25	70	45
35	70	35
45	75	30
20	85	65
35	90	55
25	90	65
45	95	50
50	100	50
		415

Table 10

Measure of Central Tendency of the Gain Between Pre-test and Post-test of Nine Students Group 1 No Reinforcement

Central Tendency	Measure
Mean	32.78
Median	35
Mode	35

Table 11

Measure of Central Tendency of the Gain Between Pre-test and Post-test of Nine Students Group 2 Reinforcement by Sound/Slide Presentation

Central Tendency	Measure
Mean	46.11
Median	50
Modal	50 and 65

ANALYSIS OF DATA

Problem: Is there a significant difference between the mean gain scores of two groups of students when one group does not have the lecture reinforced by learning resources media while one group is reinforced?

Null Hypothesis: There is no significant difference between the mean gain scores of students taught by lecture and those who have the lecture reinforced by learning resources media.

H_0: $\bar{X}_1 = \bar{X}_2$

Alternate Hypothesis: There is a significant difference between the mean gain scores of students taught by lecture and those who have the lecture reinforced by learning resources media.

H_a $\bar{X}_2 > \bar{X}_1$

Level of Significance and Critical t values: Level of Significance: .05
The critical t value for a two-tailed test with (9 + 9 - 2) degrees of freedom is 1.746; therefore, accept null hypothesis if $t > 1.746$ or $t < -1.746$.

Calculations:

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{(n_1-1)S_1^2 + (n_2-1)S_2^2}{(n_1 + n_2 - 2)}\left(\frac{1}{n_1} + \frac{1}{n_2}\right)}}$$

where

$\bar{X}_1 = 32.78$ $\bar{X}_2 = 46.11$

$S_1 = 8.20$ $S_2 = 14.49$

$n_1 = 9$ $n_2 = 9$

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$$t = \frac{32.78 - 46.11}{\sqrt{\frac{(9-1)\,(8.20)^2 + (9-1)\,(14.49)^2}{(9+9-2)}\left(\frac{1}{9}+\frac{1}{9}\right)}}$$

$$t = \frac{-13.33}{\sqrt{\frac{(8)\,(67.24) + (8)\,(209.96}{16}\left(\frac{2}{9}\right)}}$$

$$t = \frac{-13.33}{\sqrt{\left(\frac{537.92 + 1679.68}{16}\right)\left(\frac{2}{9}\right)}}$$

$$t = \frac{-13.33}{\sqrt{\left(\frac{2217.60}{16}\right)\left(\frac{2}{9}\right)}}$$

$$t = \frac{-13.33}{\sqrt{\frac{4435.20}{144}}}$$

$$t = \frac{-13.33}{\sqrt{30.80}}$$

$$t = \frac{-13.33}{5.54977477}$$

$$t = -2.4018992756349$$

$$t = -2.402$$

Conclusion: Since the calculated value of "t" does exceed the critical value, the null hypothesis is rejected; there is a significant difference between the mean gains of the two groups of students.

CONCLUSIONS AND RECOMMENDATIONS

CONCLUSION

This practicum indicated through the information provided by instructors and students that there is a felt need to provide services to off-campus classes. The instructors and students also indicated the services were helpful. (See Tables 3, 4, 5, 6). Of equal importance is the fact that the research that was made available by testing one class of students to determine if there was a significant difference in the mean gain scores between Group 1 and Group 2 proved that Group 2 scored significantly higher than Group 1. Group 2 had reinforcement by learning resources media. (See Tables 8 - 11, and Appendices D and E).

The media circulated at this point does not support the need for a van; however, the maintenance of one's vehicle makes one concerned about individual's expressed desire for a college vehicle.

RECOMMENDATIONS

It is therefore recommended:

1. That off-campus Learning Resources services be continued.
2. That extensive evaluation of services should continue.
3. That additional media be purchased and developed for off-campus classes.
4. That State meetings of Learning Resources personnel be held to discuss provisions for off-campus learners.
5. That additional comparisons be made to determine significance of learning resources media for off-campus classes.
6. That further data be kept to support or reject the need to acquire a van.

BIBLIOGRAPHY

BIBLIOGRAPHY

A. Books

Carnegie Commission on Higher Education. Reform on Campus. New York: McGraw-Hill, 1972.

Carnegie Commission on Higher Education. The Fourth Revolution. New York: McGraw-Hill, 1972.

Carnegie Commission on Higher Education. Toward a Learning Society. New York: McGraw-Hill, 1972.

Johnson, B. Lamar. Islands of Innovation Expanding. Beverly Hills: Glencoe Press, 1969, pp. 163-168.

Knoell, Dorothy. Planning Colleges for the Community. San Franscisco: Jossey-Bass, Inc., 1973.

Richardson, Richard and others. Governance for the Two-Year College. Englewood Cliffs: Prentice-Hall, 1972, pp. 164-165.

B. Magazines

Betts, Lee J. "The Evolution of Open Education," Community and Junior College Journal, March, 1973, p. 16.

Broward Junior College. "Island Campus Grows with Modules," College and University Business, August, 1974, p. 28.

Gleazer, Edmund J., Jr. "Beyond the Open Door, the Open College," Community and Junior College Journal, August - September, 1974.

C. Other

Office of Planning and Development, Wilkes Community College, August, 1974.

APPENDIX A

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WILKES COMMUNITY COLLEGE
DRAWER 120 WILKESBORO, NORTH CAROLINA 28697

September 9, 1974

Greetings!

Perhaps I have too long over looked our services to our off-campus classes. To save me from re-inventing a wheel, will you take about 5 minutes and complete the following questionnaire for me?

Your information is greatly appreciated.

Sincerely,

Fay Byrd

Mrs. Fay Byrd, Director
Division of Learning Resources

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QUESTIONNAIRE CONCERNING LEARNING RESOURCES

PROVIDED FOR OFF-CAMPUS STUDENTS

Director _____

Community College or Technical Institute Total returned - 42

1. Does your college provide instruction off-campus?

42 1. Yes
___ 2. No

2. If your answer is yes, please check each instructional area that is provided off-campus.

37 1. Continuing education
39 a. ABE
28 b. GED
27 c. High School Diploma
35 d. General interest courses
16 e. Other
10 2. College Transfer
23 3. Vocational
24 4. Occupational

3. Which of the following means do you utilize to provide Learning Resources to the students?

34 1. Via the instructor
31 2. The students come to the LR
23 3. The LR takes services to the classes
18 4. Satellite labs

4. If you checked number 3 of 3, which types of services are provided?

19 1. Books
24 2. A-V Media
24 3. Equipment
13 4. GED Instruction
6 5. Tutoring
1 6. Other (list)

5. How often do you deliver and pick up media?

22 1. Not applicable
2 2. Weekly
2 3. Monthly
5 4. Quarterly
6 5. Daily
9 6. On demand (as need arises)
1 7. Yearly

6. Which of the following types of transportation do you utilize?

14	1. LR staff's vehicle	5	4. Instructors vehicle
6	2. State vehicle	1	5. Traveling Staff of Inst.
6	3. College vehicle	1	6. Ex. Director

7. If the answer for no. 6 is either 2 or 3, which type of vehicle do you use?

9	1. Car	2	3. Van
5	2. Truck	1	4. Special, such as book-mobile

8. If the vehicle belongs to the LR staff, how is the person reimbursed?

15	1. Regular state travel
1	2. Local supplement
1	3. Gasoline purchased by institution
4	4. Not reimbursed

9. If you do have off-campus classes but have not been able to provide the needed learning services by taking the services to the classes, would you like to participate in a group discussion to determine the means?

17	1. Yes
8	2. No

10. If you feel you have a good off-campus service, will you share your success with me? If so, please indicate on this page.

INSTRUCTOR'S QUESTIONNAIRE TO DETERMINE

THE NEEDED LEARNING RESOURCES SERVICES

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Instructor Totals Location Alleghany (Sparta)

Course 9 returned

Mrs. Mary Houston, Librarian for the Division of Learning Resources, will be available to deliver the service of the Division to you and your students. In order that the Division serve you better, it is hoped that you will identify your needs.

1. Do you want a bibliography of the resources, books and audio-visual media, through the Division?

   9 1. Yes
   _____2. No

2. Do you have course objectives or topics that will identify your needs?

   7 1. Yes
   2 2. No
   _____3. Please list_____

3. Do you have A-V equipment provided by the local school?

   7 1. Yes
   1 2. No

4. Do you want someone to instruct you in the usage of either of these types of A-V equipment?

   _____1. 16mm projectors
   _____2. tape recorders
   1 3. filmstrip projector
   _____4. videotape recorder
   _____5. other (please indicate)_____

5. Do you want a list of the magazines that are received by the Division of Learning Resources?

   6 1. Yes
   3 2. No

6. Do you wish to help select books for the Division of Learning Resources?

5 1. Yes
4 2. No

7. Do you want a delivery system to provide transportation and instruction for use of equipment and media for you and your students?

8 1. Yes
1 2. No

8. How frequently do you anticipate the need for the service?

____ 1. weekly
4 2. twice a month
4 3. once a month
1 4. as needed

INSTRUCTOR'S QUESTIONNAIRE TO DETERMINE

THE NEEDED LEARNING RESOURCES SERVICES

Instructor Totals Location Ashe

Course 13 returned

Mrs. Mary Houston, Librarian for the Division of Learning Resources, will be available to deliver the service of the Division to you and your students. In order that the Division serve you better, it is hoped that you will identify your needs.

1. Do you want a bibliography of the resources, books and audio-visual media, through the Division?

13 1. Yes
2. No

2. Do you have course objectives or topics that will identify your needs?

10 1. Yes
3 2. No
2 3. Please list

3. Do you have A-V equipment provided by the local school?

10 1. Yes
3 2. No

4. Do you want someone to instruct you in the usage of either of these types of A-V equipment?

4 1. 16mm projectors
2. tape recorders
1 3. filmstrip projector
4 4. videotape r corde
5. other (please indicate)

5. Do you want a list of the magazines that are received by the Division of Learning Resources?

8 1. Yes
5 2. No

6. Do you wish to help select books for the Division of Learning Resources?

2 1. Yes
11 2. No

7. Do you want a delivery system to provide transportation and instruction for use of equipment and media for you and your students?

11 1. Yes
2 2. No

8. How frequently do you anticipate the need for the service?

2 1. weekly
1 2. twice a month
8 3. once a month
1 4. as needed

INSTRUCTOR/STUDENT EVALUATION OF LEARNING RESOURCES

SERVICES FOR OFF-CAMPUS CLASSES - FALL QUARTER 1974

Alleghany County 10 Instructors; 58 Students

Directions: Please check the appropriate answer for each of the questions.

1. Were Learning Resources services of Wilkes Community College made available to you?

Instructor		Student	
10	1. Yes	53	1. Yes
	2. No	5	2. No

2. Did you receive lists of the media?

8	1. Yes	30	1. Yes
1	2. No	28	2. No

3. Were the lists helpful?

9	1. Yes	23	1. Yes
1	2. No	7	2. No

4. Did the lists contain sufficient media for your courses?

9	1. Yes	26	1. Yes
1	2. No	32	2. No

5. Were the services adequate?

9	1. Yes	26	1. Yes
1	2. No	32	2. No

6. Did the media help instructors provide better teaching experiences?

10	1. Yes	48	1. Yes
	2. No	10	2. No

7. Did the media help the students to gain better understanding of the subject?

7	1. Yes	48	1. Yes
3	2. No	10	2. No

8. Did you select media for purchase?

5	1. Yes	36	1. Yes
5	2. No	22	2. No

9. Do you feel the services should be continued?

9	1. Yes	46	1. Yes
1	2. No	8	2. No

10. Were the Learning Resources staff efficient?

8	1. Yes	0	1. Yes
2	2. No	0	2. No

11. List improvements that can be made in the services.

Al eghany County BEST COPY AVAILABLE

11. List improvements that can be made in the services.

Students

1. The film we received was out-dated and the class only received one.
2. The film was out-dated, but brought out the point.
3. Didn't like to pay library fee.
4. Paid for library card and are not able to use it.
5. More!
6. More A-V's.
7. More and better films.
8. A list of materials available.
9. Different areas of better selection.
10. The service should be discontinued if it cannot be improved.
11. Need more information on what's happening at the college.
12. Yes. More of them.
13. More, and more up-to-date material.
14. Longer, and more of them.
15. Better selection.

Instructors

1. Give a short synopses of films on file, not just list by name.
2. I have no ideas currently.
3. It is okay as is.
4. More related 16mm films.
5. More "hands on" items such as types of materials, equipment.
6. I think the services are very good and should be continued.
7. The service was efficient in every way and I find no faults.
8. The services were excellent and have been much help to me. The services are very friendly and are real helpful.
9. Need more films.
10. The Learning Resources Services have been a great help to me as an instructor in Value Analysis. I feel the program should be continued and allowed to grow so that all instructors have a chance to use it and see how much help it really can be. The films were great for the students. I feel they can get an overall picture of the subject and will remember much more of it. The staff are to be thanked for being so nice and helpful.

INSTRUCTION/STUDENT EVALUATION OF LEARNING RESOURCES

SERVICES FOR OFF-CAMPUS CLASSES - FALL QUARTER 1974

Ashe County 9 Instructors; 94 Students

Directions: Please check the appropriate answer for each of the questions.

1. Were Learning Resources services of Wilkes Community College made available to you?

Instructor		Student	
8	1. Yes	84	1. Yes
1	2. No	10	2. No

2. Did you receive lists of the media?

9	1. Yes	50	1. Yes
0	2. No	44	2. No

3. Were the lists helpful?

8	1. Yes	49	1. Yes
1	2. No	45	2. No

4. Did the lists contain sufficient media for your courses?

8	1. Yes	50	1. Yes
1	2. No	12	2. No

5. Were the services adequate?

8	1. Yes	50	1. Yes
1	2. No	44	2. No

6. Did the media help instructors provide better teaching experiences?

8	1. Yes	88	1. Yes
1	2. No	6	2. No

7. Did the media help the students to gain better understanding of the subject?

7	1. Yes	77	1. Yes
2	2. No	17	2. No

8. Did you select media for purchase?

0	1. Yes	0	1. Yes
0	2. No	0	2. No

9. Do you feel the services should be continued?

9	1. Yes	77	1. Yes
0	2. No	17	2. No

10. Were the Learning Resources staff efficient?

	1. Yes	88	1. Yes
	2. No	6	2. No

11. List improvements that can be made in the services.

Ashe County

11. List improvements that can be made in the services.

Students

1. We need more sufficient connection methods.
2. O. K.
3. They are satisfactory as is.
4. Send a list of media for student. Let student place a check mark on list what media he needs and work out a transportation way to bring media to Ashe County.
5. I don't know.
6. By showing more films for class-room offering teachers more films from college. Seems as if this serivce is very good.
7. No imporvement needed. All is okay as is.
8. Satisfactory.
9. Make students more aware of services.
10. Please get the rest of us a library card.
11. A list for students.
12. Keep the VA checks straightened out.

Instructors

1. The service was efficient in every way and I find no faults.
2. I have no ideas.
3. It's okay as is.
4. Improved.

APPENDIX B

OFF-CAMPUS

SCHEDULE

	Tuesday	Wednesday	Thursday
September 10			Sparta
September 11		Ashe	
September 17	Ashe		
September 18		Sparta	
September 25			Sparta
September 26		Ashe	
October 1	Ashe		
October 2		Sparta	
October 9			Sparta
October 10		Ashe	
October 15	Ashe		
October 16		Sparta	
October 23			Sparta
October 24		Ashe	
October 29	Ashe		
October 30		Sparta	
November 6			Sparta
November 7		Ashe	
November 13	Ashe		

Mileage to Sparta	38
Mileage to Ashe	47
Travel	15¢ per mile
Cost	$243.60

APPENDIX C

SCHEDULE

OFF-CAMPUS CLASSES

Tuesday

Dept.	Course No.	Course Title	Instructor	Time	Place	No. of Students
AGR	0203	Fruit & Veg.	Owens	6:00	ASHE	27
AGR	0202	Livestock	Cox	6:30	ASHE	22
AGR	0202	Livestock	Shoaf	6:30	ASHE	23
BUS	0123	Bus. Finance	Jones	7:00	ASHE	14
COM	111	Composition	Sturgill	7:00	ASHE	40
MAT	0110	Bus. Math	Taylor	6:30	ASHE	35
AGR	0202	Livestock	Felmet	6:00	SPARTA	17
AGR	0202	Livestock	Hampton	6:00	SPARTA	15
AGR	0202	Livestock	Faw	6:00	SPARTA	19
AGR	0203	Fruit & Veg.	Hampton	8:30	SPARTA	19
AGR	0203	Fruit & Veg.	Felmet	8:30	SPARTA	18

SCHEDULE

OFF-CAMPUS CLASSES

Wednesday

Dept.	Course No.	Course Title	Instructor	Time	Place	No. of Students
AGR	0202	Livstk Hous. Equip.	Dyvall	6:30	ASHE	22
AGR	0202	Livstk Hous. Equip.	Ward	6:30	ASHE	24
AGR	0203	Fruit & Veg. Prod.	Owen	6:30	ASHE	22
BUS	0120	Accounting II	Daniel	5:30	ASHE	13
BUS	0102	Typewriting I	Goss	6:00	ASHE	14
BUS	0229	Taxes	Roche	5:30	ASHE	12
BUS	0243	Marketing Pro.	Harless	8:00	ASHE	11
ED	0104	Intro. Data Pro.	Herbert	5:30	ASHE	10
BUS	0272	Personnel Man.	Lovelace	8:00	ASHE	20
MAT	0101	Ind. Math	Goodman	8:00	ASHE	11
MAT	0110	Bus. Math	Taylor	8:30	ASHE	35
BUS	0120	Accounting II	Scott	5:30	ASHE	27
ISC	0209	Plant Layout	Hagler	5:30	ASHE	12
BUS	0120	Accounting I	Bost	5:30	SPARTA	33
ISC	0209	Plant Layout	Pardue	6:00	SPARTA	15
ISC	0231	Mfg. Processes	Griffin	6:00	SPARTA	26
BUS	0272	Personnel Mgt.	Sheets	8:00	SPARTA	17
BUS	0235	Prin. of Mgt.	Bost	8:00	SPARTA	29
MAT	0101	Tech. Math	Davis	8:00	SPARTA	15
MAT	0110	Bus. Math	Miles	8:30	SPARTA	26
BUS	0211	Office Mach.	Kennedy	5:30	SPARTA	10
BUS	0211	Office Mach.	Miles	5:30	SPARTA	9

SCHEDULE

OFF-CAMPUS CLASSES

Thursday

Dept.	Course No.	Course Title	Instructor	Time	Place	No. of Students
BUS	0117	Real Estate	Lopp	6:00	SPARTA	8
BUS	0123	Bus. Finance	Davis	6:00	SPARTA	22
BUS	0247	Bus. Ins.	Richardson	6:00	SPARTA	25
ISC	0204	Value Analysis	Kerley	6:00	SPARTA	11
ISC	0204	Value Analysis	Kennedy	7:00	SPARTA	10
BUS	0271	Office Mgt.	Hudson	7:00	SPARTA	18
PSY	0103	Human Dev.	Howard	6:30	SPARTA	7

APPENDIX D

TREATMENT

A class of eighteen students took a pre-test on Body Language. Next, an instructor lectured. Then the students were divided. Every other student stayed in the classroom. The other nine students went to another room. Those who remained in their room became Group 1. Those leaving the room became Group 2. Group 1 took a post-test. Group 2 saw a sound/slide presentation on the same material that was covered in the lecture. Then Group 2 took the post-test.

The pre-test and post-test were identical.

I. Directions: Select the best answer and write the letter that precedes the best answer on the line that precedes the number for each statement. (5 points each)

_____ 1. A student who knows an answer will communicate by (a) avoiding eye contact, (b) making eye contact, (c) dropping a pencil to draw attention, (d) both a and b.

_____ 2. A frown will express (a) displeasure, (b) disagreement, (c) disgust, (d) either a, b, or c, (e) none of these.

_____ 3. A good poker hand can more likely be determined by the player's (a) posture, (b) frown, (c) dilation of the pupils, (d) gesture.

_____ 4. According to authorities in kinesics, a student commonly expresses that he has stopped communication between himself and the instructor by (a) closing his eyes, (b) pretending to read a book, (c) crossing his legs, (d) crossing his arms over his chest.

_____ 5. The instructor can usually be distinguished from the student by positions expressed - (a) teacher stands, student sits, (b) student stands, teacher sits, (c) teacher and student stand, (d) teacher and student sit.

_____ 6. The relationship of two people can at times be determined by space; two business people conversing would rarely get closer than (a) five feet, (b) three feet, (c) one and one-half feet, (d) four feet.

_____ 7. In a normal non-professional conversation, the total message communicated by facial expressions is (a) 55%, (b) 38%, (c) 7%, (d) neither.

_____ 8. Tapping the fingers can mean (a) independence, (b) nervousness, (c) irritability, (d) b and c, (e) a, b, or c, (f) none of these.

II. Directions: Limit your answer to one-half to one page. (10 points each)

1. It is believed that most people past the teen-age years have characteristic facial expressions, gestures, and a general posture which reveal their personality. Describe how you will look at the age of 50. Explain your prediction based on your present habits or traits.

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III. Define (5 points each)

1. Body language

2. Kinesics

3. Prosemics

4. Gestures

IV. How much space is normal between the following:

_____ a. parent - child
_____ b. teacher - pupil
_____ c. friend - friend
_____ d. lover - lover
_____ e. employee - employer
_____ f. student - teacher

1. close or far - contact - 18 in.
2. 12 - 25 ft.
3. 7 - 25 ft.
4. 18 inches
5. 18 inches - 2½ feet
6. 0 - 25 feet
7. 4 - 8 feet
8. 25 - 30 feet

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ASSESSMENT KEY

b 1.

d 2.

c 3.

d 4.

a 5.

b 6.

a 7.

e 8.

1. The answers might reflect some of the following forms of Kinesics. You should have at least five specific descriptions for each of the following: facial expressions, gestures, and posture.
2. Personal space relationship might be interpreted as follows:
   a. parent 18 inches.
   b. teacher 12-25 feet.
   c. friend close friendships 18 inches-2½ feet.
   d. lover close or far--contact to 18 inches.
   e. employee 7-25 feet.
   f. student 12-25 feet.

Each correct answer will consist of 6.6 points.

APPENDIX E

NO REINFORCEMENT

(Group 1)

Pre-test	Post-test	Difference	$(X-\bar{X}_1)$	$(X-\bar{X}_1)^2$
15	40	25	-7.78	60.5284
25	50	25	-7.78	60.5284
30	50	20	-12.78	163.3284
25	60	35	2.22	4.9284
35	60	35	2.22	4.9284
35	60	35	2.22	4.9284
40	70	30	-2.78	7.7284
25	70	45	12.22	149.3284
40	85	45	12.22	149.3284
		295		605.5556

Mean of Difference

$$\bar{X}_1 = \frac{295}{9} = 32.78$$

$$S_1 = \sqrt{\frac{605.5556}{9}}$$

$$S_1 = \sqrt{67.283955...}$$

$$S_1 = 8.20267978 \approx 8.20$$

REINFORCEMENT

(Group 2)

Pre-test	Post-test	Difference	$(X-\bar{X}_2)$	$(X-X_2)^2$
40	60	20	-26.11	681.7321
25	70	45	-1.11	1.2321
35	70	35	-11.11	123.4321
45	75	30	-16.11	259.5321
20	85	65	18.89	356.8321
35	90	55	8.89	79.0321
25	90	65	18.89	356.8321
45	95	50	3.89	15.1321
50	100	50	3.89	15.1321
		415		1888.8889

Mean of Difference

$$\bar{X}_2 = \frac{415}{9} = 46.11$$

$$S_2 = \sqrt{\frac{1888.8889}{9}}$$

$$S_2 = \sqrt{209.87654...}$$

$$S_2 \approx 14.48711650$$

$$S_2 \simeq 14.49$$

59

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